

MA4X193 (MA193)

Silicon epitaxial planar type

For switching circuit

■ Features

- Four isolated elements contained in one package
- Short reverse recovery time t_{rr}
- Bridge diodes for surface mounting
- Anode common + cathode common composite product

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---|-------------|-------------|------------------|
| Reverse voltage | V_R | 80 | V |
| Repetitive peak reverse voltage | V_{RRM} | 80 | V |
| Forward current (Average) | $I_{F(AV)}$ | 70 | mA |
| Repetitive peak forward current | I_{FRM} | 150 | mA |
| Non-repetitive peak forward surge current * | I_{FSM} | 250 | mA |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

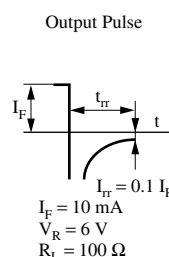
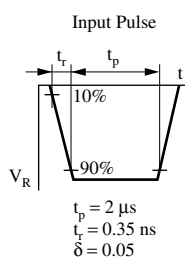
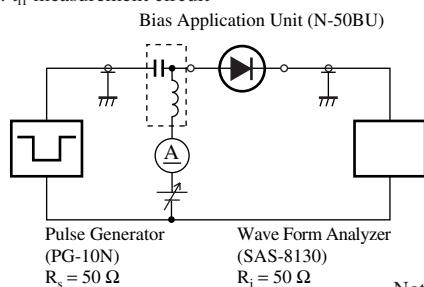
Note) *: $t = 1 \text{ s}$

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

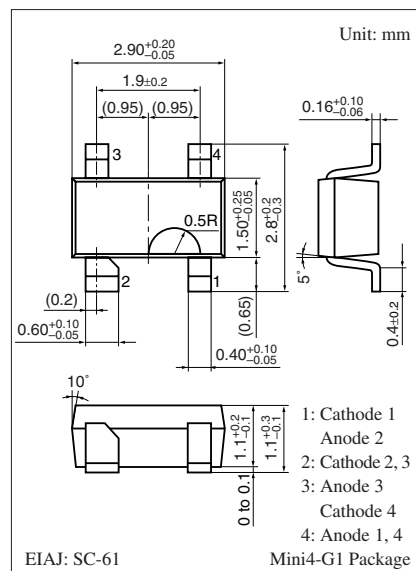
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|--|-----|-----|-----|------|
| Forward voltage | V_F | $I_F = 70 \text{ mA}$ | | | 1.2 | V |
| Reverse voltage | V_R | $I_R = 100 \mu\text{A}$ | 80 | | | V |
| Reverse current | I_R | $V_R = 75 \text{ V}$ | | | 100 | nA |
| Terminal capacitance | C_t | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ | | | 15 | pF |
| Reverse recovery time * | t_{rr} | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100 \Omega$ | | | 10 | ns |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 100 MHz.

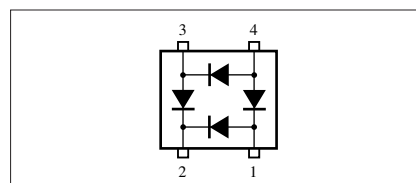
3. *: t_{rr} measurement circuit

Note) The part number in the parenthesis shows conventional part number.

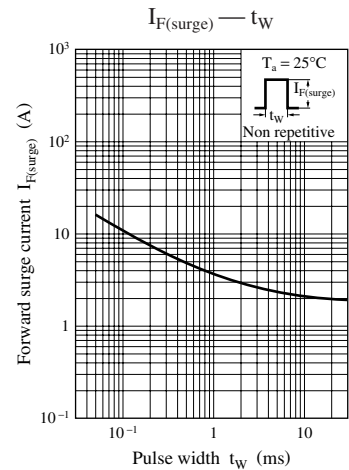
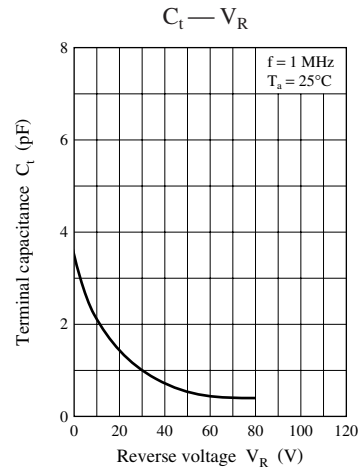
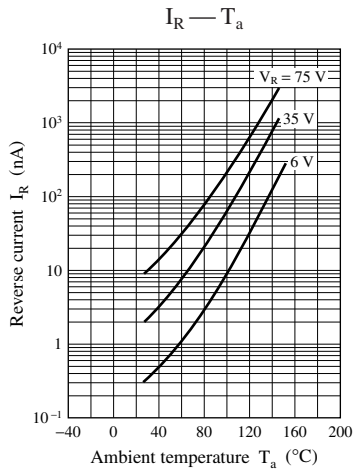
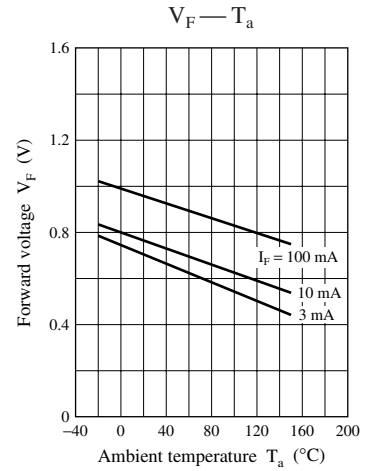
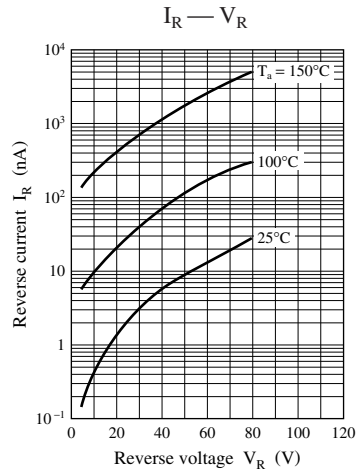
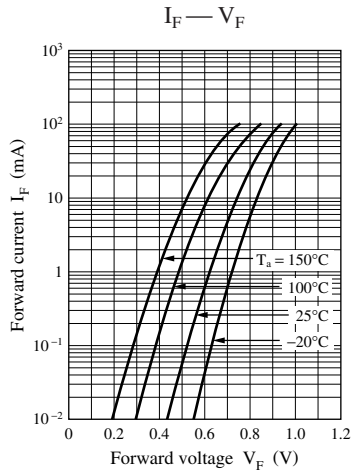


Marking Symbol: M2Z

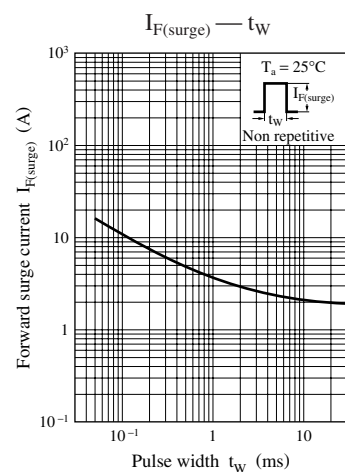
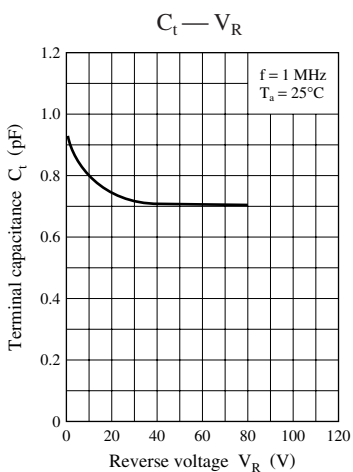
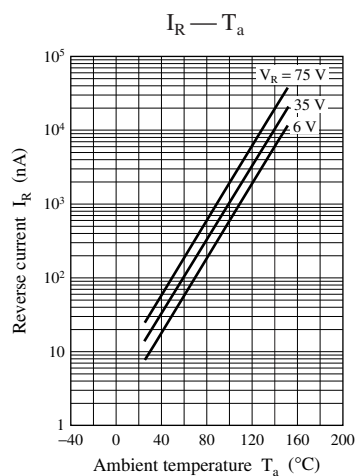
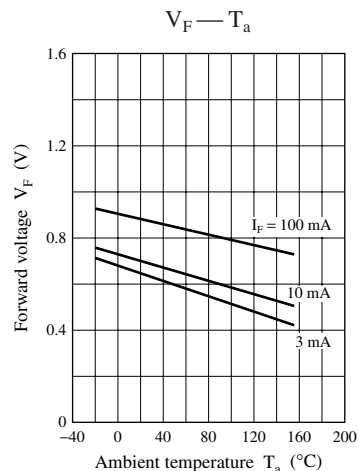
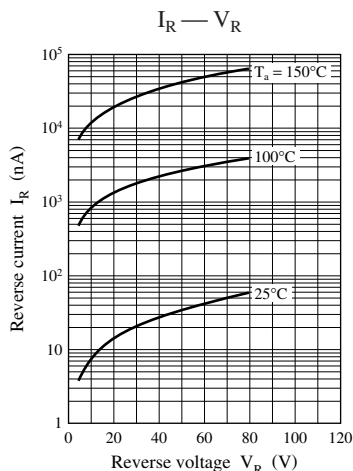
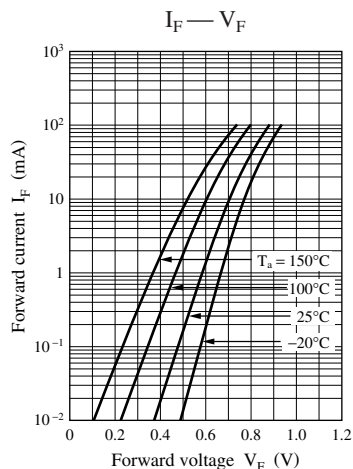
Internal Connection



4-1 and 4-3 pins (anode common) characteristics charts



1-2 and 3-2 pins (cathode common) characteristics charts



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